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| EXAMINER | |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/588,586 | TWISS, ADAM | |
| | Examiner | Art Unit | |
| | BENJAMIN ELLIOTT | 2419 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *13 June 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *26-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *26-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 June 2007* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/10/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

1. Claims 26-52 have been examined and are pending.

### *Information Disclosure Statement*

2. An initialed and dated copy of Applicant's IDS form 1449 dated 10/10/2006 has been attached to the Instant Office Action.

### *Drawings*

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: **Paragraphs [0062-0064] mention "gateway node 408" which is missing from Figures 4a and 4b, as it is described with mention to "402" and "406" of both figures; Paragraph [0064] of written description mentions "network 412" which is missing from Figure 4c.** Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and

informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to because **Figure 5a describes an "IP backbone connection 514" in paragraph [0065] of the written description, which then reads "504" in the aforementioned figure.** Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

5. The disclosure is objected to because of the following informalities:

a) Paragraph [0009] does not reference any figure with regards to bold-face numbers **20**, **21**, **80**, and **139**. Appropriate correction is required.

b) Paragraph [0066] does not reference any figure with regards to bold-face numbers **6346**, **6347**, and **1214**. Appropriate correction is required.

c) Paragraph [0068] describes "ports **18** and **25**" in the written description with reference to Figure 5b, wherein the ports are illustrated using the numbers "**80**" and "**25**". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 26-47 and 50-52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per Claims 26-44, it is unclear what is meant by the term "signaling data". For example, the statement in line 8 of Claim 26 recites "reading signaling data" and reads either the signaling data of line 2 of Claim 26, or the stored signaling data of line 7 of Claim 26. Examiner has taken the storing of signaling data to mean the signaling data received is compared to pre-existing signaling data already stored for purposes of examination.

As per Claim 45-47, it is unclear what is meant by the term "signaling data". For example, the statement in line 14 of Claim 26 recites "reading signaling data" and reads either the signaling data of line 2 of Claim 26, or the stored signaling data of lines 7 of Claim 26. Examiner has taken the storing of signaling data to mean the signaling data received is compared to pre-existing signaling data already stored for purposes of examination.

As per Claims 26-47, it is unclear what is meant by the term "traffic". The term "traffic" causes confusion by being part of a communication session between two entities in line 3 of Claim 26, and then being part of a data network in line 8 of Claim 26. Examiner has taken "traffic" of line 3 to mean traffic incoming from either a first entity or a second entity, and "traffic" of line 8 to mean all other network traffic, not including the first or second entity for purposes of examination.

Claim 30 recites the phrase "signaling comprises signaling with the signaling data" is confusing in its text and is therefore unclear. For purposes of examination, Examiner has taken "signaling data" to mean header information.

Claim 45 defines the term "code" in more than one way with regards to its function. In Claim 45, lines 9-17, "code" is redefined numerous times. Examiner has taken "code" to mean one computer-readable program that can perform all functions listed in Claim 45, for purposes of examination.

***Claim Rejections - 35 USC § 101***

8. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 43 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. "Processor control code..." as recited in the claim is directed to a program per se, which is non-statutory.

Claims 44, 48, and 50-52 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to "a carrier medium". However, the specification defines a carrier medium to include signals as a means for implementation ([0042] of Patent Publication to the Instant Application). Signals are non-statutory.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 26-29, 32, 38-46 and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,754,188 B1 to Garahi et al. (hereinafter "Garahi") in view of US Patent 6,466,578 B1 to Mauger et al. (hereinafter "Mauger").

As per Claims 26 and 43, Garahi discloses **a method of controlling traffic on a data network, the traffic comprising payload data and associated signaling data** (Garahi: Col. 2, lines 14-18. A network node is enabled to route data packets to other nodes in a wireless communication network based on the content of the data packet. Col. 4, lines 66-67; Col. 5, line 1. Voice, video, and data are types of payload for the packet. Col. 3, lines 57-62. Each node transmits routing table information to other neighboring nodes in the network at periodic intervals. This corresponds to associated signaling data.), **the method comprising:**

**reading a portion of the payload data for traffic of a communications session between a first entity and a second entity communicating over the network** (Garahi: Figures 3 and 4; Col. 6, lines 39-43. Node 102.1 receives a data packet and examines the contents of the packet. Node 102.1 may receive the packet from 102.6, 102.4, or 102.2.);

**determining whether the portion of payload data identifies a type of traffic to be controlled** (Garahi: Col. 4, lines 66-67 and Col. 5, lines 1-30. The types of traffic contained in the data packet that can be controlled are: Type 1 data, Type

2 data, and Type 3 data. Col. 6, lines 43-49. The controller determines and specifies a traffic path based on the content of payload. For example, if the controller identifies the type to be "Type 1" traffic, it chooses a path of low latency.).

For Claim 43, Garahi discloses **processor control code to, when running, control traffic on a data network** (Col. 14, lines 28-33. The computer readable medium contains instructions to perform the method.).

Although Garahi does teach storing signaling data (in the form of routing tables), comparing incoming headers with stored headers (the stored headers are pre-defined), and controlling the traffic (based on the type of traffic), Garahi is silent on storing the signaling data associated with the incoming packet, comparing the signaling data with the previously stored signaling data, and controlling the further communication traffic.

However, Mauger discloses **storing signaling data associated with the portion of payload data** and **reading signaling data for traffic on the network and comparing the read signaling data with the stored signaling data to identify further traffic of the controlled type** (Mauger: Figure 4; Col. 3, lines 50 -54. A packet header from a first packet is stored in content addressable memory for comparison with information from other packets. Col. 3, lines 41-44. The information that is compared is header information.). Mauger further describes **controlling the further traffic session responsive to the identification** (Mauger: Col. 3, lines 44-48. If the comparison is a match, the packet is

encapsulated and set for transmission for the designated flow. Col. 3, lines 55-58. If there is no match, the packet is passed to a default router.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the controller of Garahi to include storing incoming header information, comparing the header information with existing, stored header information, and controlling the session traffic as taught by Mauger to overcome the deficiencies IP voice telephony, most specifically the ability for the transport of connectionless packet traffic in real time, wherein the destination of the packet has already been established (Mauger: Col. 1, lines 36-44 and col. 2, lines 37-41).

As per Claim 27, Garahi is silent on controlling a further communication.

However, Mauger discloses **a method as claimed in Claim 26, wherein the controlling comprises controlling a route of the further or resumed communications session traffic** (Mauger: Col. 3, lines 44-48. If the comparison is a match, the packet is encapsulated and set for transmission for the designated flow. Col. 3, lines 55-58. If there is no match, the packet is passed to a default router.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the controller of Garahi to include controlling a route of further communications as taught by Mauger to overcome the deficiencies IP voice telephony, most specifically the ability for the transport of connectionless packet traffic in real time, wherein the destination of the packet

has already been established (Mauger: Col. 1, lines 36-44 and col. 2, lines 37-41).

As per Claim 28, Garahi discloses **a method as claimed in Claim 26, wherein the reading of the communications session traffic includes reading at least a portion of the signaling data for the session traffic** (Garahi: Figures 3 and 4; Col. 6, lines 39-43. Node 102.1 receives a data packet and examines the contents of the packet.), **wherein the determining includes determining from the signaling data an address of an originator of the controlled type of traffic** (Garahi: Col. 4, lines 66-67 and Col. 5, lines 1-30. The types of traffic contained in the data packet that can be controlled are: Type 1 data, Type 2 data, and Type 3 data. Col. 7, lines 41-52. The receiver of the packet determines the best effort route and attaches an addressable header and sends it to the next hop in the connection, therefore, the receiver of the packet knows the sender of the packet.), **the originator comprising one of the first and second entities, and wherein the signaling comprises sending a signal to the originator using the determined address** (Garahi: Col. 3, lines 57-62. Routing tables are broadcast to each of the nodes in the network.).

As per Claim 29, Garahi discloses **a method as claimed in Claim 26, wherein the signaling comprises signaling with the signaling data** (Garahi: Col. 3, lines 47-51. The mobile unit of the system is capable of sending and receiving packetized data signals.).

As per Claim 32, Garahi is silent on storing in response to determining.

However, Mauger discloses **a method as claimed in Claim 26, wherein the storing is responsive to the determining** (Mauger: Col. 3, lines 41-54. The routing function determines if the packet is part of the flow. The packet can be stored in memory for comparison with subsequent packets.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the controller of Garahi to include store the packet information after determining the packet type as taught by Mauger to overcome the deficiencies IP voice telephony, most specifically the ability for the transport of connectionless packet traffic in real time, wherein the destination of the packet has already been established (Mauger: Col. 1, lines 36-44 and col. 2, lines 37-41).

As per Claim 38, Garahi is silent on the signaling information includes a destination identifier.

However, Mauger discloses **a method as claimed in Claim 26, wherein the network comprises a packet data network and wherein the signaling data includes a destination identifier** (Mauger: Figure 3. The data packet contains a destination identity (DI).).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of communicating data packets of Garahi to include header information containing a destination identifier as taught by Mauger to properly route data packets from a source to a destination in a communication network (Mauger: Col. 1, lines 8-11).

As per Claim 39, Garahi is silent on the network comprising an IP network and the signaling data containing a destination address and port.

However, Mauger discloses **a method as claimed in Claim 38, wherein the network comprises an internet protocol (IP) network in particular a transmission control protocol (TCP) IP network, and wherein the signaling data includes a destination address and port number** (Mauger: Col. 3, lines 48-51. IP packets are used to determine the existence of a stream of data based on the same source and destination addresses. Col. 3, lines 55-58. The proper destination port is determined if the flow is not recognized.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of communicating data packets of Garahi to include an IP network and information regarding the destination port as taught by Mauger to properly route data packets from a source to a destination in a communication network (Mauger: Col. 1, lines 8-11).

As per Claim 40, Garahi discloses **a method as claimed in Claim 26, wherein the type of traffic to be controlled includes peer-to-peer protocol network traffic** (Garahi: Col. 4, lines 36-39; Figure 3. One node is able to connect with and establish communication with another node. Col. 4, lines 66-67 and Col. 5, lines 1-30. The types of traffic contained in the data packet that can be controlled are: Type 1 data, Type 2 data, and Type 3 data.).

As per Claim 41, Garahi discloses **a method as claimed in Claim 40, wherein the controlling comprises routing the peer-to-peer traffic to a peer-to-peer network gateway** (Garahi: Col. 3, lines 35-40. The network comprises gateway routers so nodes may access other networks.).

As per Claim 42, Garahi discloses **a method as claimed in Claim 40, wherein the controlling comprises routing the peer-to-peer traffic to a peer-to-peer network cache** (Garahi: Figure 2; Col. 3, lines 54-57. Each node contains memory for storing routing information.).

As per Claim 44, Garahi discloses **a carrier medium carrying the processor control code of Claim 43** (Garahi: Col. 14, lines 28-33. The computer readable medium contains instructions to perform the method.).

As per Claim 50, Garahi discloses **a router including a processor and the carrier medium of Claim 43** (Garahi: Col. 3, lines 41-44. The nodes can act as routers in the communication session.).

As per Claim 51, Garahi discloses **a router including a processor and the carrier medium of Claim 43 or Claim 48** (Garahi: Col. 3, lines 41-44. The nodes can act as routers in the communication session.).

As per Claim 52, Garahi discloses **a router including a processor and the carrier medium of Claim 43 or Claim 49** (Garahi: Col. 3, lines 41-44. The nodes can act as routers in the communication session.).

As per Claim 45, Garahi discloses **a router for controlling traffic on a data network, the traffic comprising payload data and associated signaling data** (Garahi: Col. 3, lines 41-44. The nodes can act as routers in the communication session. Col. 2, lines 14-18. A network node is enabled to route data packets to other nodes in a wireless communication network based on the content of the data packet. Col. 4, lines 66-67; Col. 5, line 1. Voice, video, and data are types of payload for the packet. Col. 3, lines 57-62. Each node transmits routing table information to other neighboring nodes in the network at periodic intervals. This corresponds to associated signaling data.), **the router comprising:**

**a network interface for interfacing with the data network** (Garahi: Figure 3; Each node contains a transceiver connected to an antenna to connect to the network.);

**a data memory operable to store data to be processed** (Garahi: Col. 3, lines 54-57. RAM is used to store routing information.);

**an instruction memory storing processor implementable code** (Garahi: Col. 3, lines 54-57. The RAM may store other things such as instructions. Col. 14, lines 28-33. The computer readable medium contains instructions to perform the method.);

**and a processor coupled to the network interface, to the data memory, and to the instruction memory and operable to process the data in accordance with code stored in the instruction memory** (Garahi: Figure 3; Col. 2, lines 26-67. A controller within the router device is operable to perform the operations and

instructions of the method.), **the stored code comprising:**

**code to read a portion of the payload data for traffic of a communications session between a first entity and a second entity communicating over the network** (Garahi: Figures 3 and 4; Col. 6, lines 39-43. Node 102.1 receives a data packet and examines the contents of the packet. Col. 2, lines 14-18. A network node is enabled to route data packets to other nodes in a wireless communication network based on the content of the data packet. Col. 4, lines 66-67; Col. 5, line 1. Voice, video, and data are types of payload for the packet. Col. 3, lines 57-62. Each node transmits routing table information to other neighboring nodes in the network at periodic intervals. This corresponds to associated signaling data.);

**code to determine whether the portion of payload data identifies a type of traffic to be controlled** (Garahi: Col. 4, lines 66-67 and Col. 5, lines 1-30. The types of traffic contained in the data packet that can be controlled are: Type 1 data, Type 2 data, and Type 3 data. Col. 6, lines 43-49. The controller determines and specifies a traffic path based on the content of payload. For example, if the controller identifies the type to be "Type 1" traffic, it chooses a path of low latency.).

Although Garahi does teach storing signaling data (in the form of routing tables), comparing incoming headers with stored headers (the stored headers are pre-defined), and controlling the traffic (based on the type of traffic), Garahi is silent on storing the signaling data associated with the incoming packet,

comparing the signaling data with the previously stored signaling data, and controlling the further communication traffic.

However, Mauger discloses **code to store signaling data associated with the portion of payload data** and **code to read signaling data for traffic on the network and comparing the read signaling data with the stored signaling data to identify further traffic of the controlled type** (Mauger: Figure 4; Col. 3, lines 50 -54. A packet header from a first packet is stored in content addressable memory for comparison with information from other packets. Col. 3, lines 41-44. The information that is compared is header information.). Mauger further describes **code to control traffic of the further or resumed communication session responsive to the identification** (Mauger: Col. 3, lines 44-48. If the comparison is a match, the packet is encapsulated and set for transmission for the designated flow. Col. 3, lines 55-58. If there is no match, the packet is passed to a default router.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the controller of Garahi to include storing incoming header information, comparing the header information with existing, stored header information, and controlling the session traffic as taught by Mauger to overcome the deficiencies IP voice telephony, most specifically the ability for the transport of connectionless packet traffic in real time, wherein the destination of the packet has already been established (Mauger: Col. 1, lines 36-44 and col. 2, lines 37-41).

As per Claim 46, Garahi discloses **a router as claimed in Claim 45, wherein network comprises a packet data network** (Garahi: Col. 2, lines 10-13. Nodes communicate with data packets in a network.), but is silent on storing destination identifiers in response to identifying the controlled type of data.

However, Mauger discloses **wherein the signaling data comprises a destination identifier to identify a destination of a packet of data comprising the traffic, and wherein the storing stores a destination identifier for traffic of the controlled type in the data memory responsive to identifying the controlled type of traffic** (Mauger: Figure 3. The data packet contains a destination identity (DI). Col. 3, lines 41-54. The routing function determines if the packet is part of the flow. The packet can be stored in memory for comparison with subsequent packets.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the controller of Garahi to include store the packet information after determining the packet type as taught by Mauger to overcome the deficiencies IP voice telephony, most specifically the ability for the transport of connectionless packet traffic in real time, wherein the destination of the packet has already been established (Mauger: Col. 1, lines 36-44 and col. 2, lines 37-41).

12. Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garahi and Mauger, and further in view of US Paten Publication 2002/0161836 A1 to Hosomi (hereinafter "Hosomi").

As per Claim 30, Garahi and Mauger are silent on the payload data containing a message.

However, Hosomi discloses **a method as claimed in Claim 26, wherein the signaling comprises sending a message in the payload data** (Hosomi: [0099]. A slave device sends retry requests to the master device in the contents of the message.).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the controller of Garahi and Mauger to include request and response messages such as retry messages in the signaling data as taught by Hosomi to give a priority to retry requests, wherein the retry requests with the highest priority are requests that have previously been sent (Hosomi: [0015], [0100]).

As per Claim 30, Garahi and Mauger are silent on the payload data containing a retry message.

However, Hosomi discloses **a method as claimed in Claim 30, wherein the message includes a request to retry establishing the communications session** (Hosomi: [0099]. A slave device sends retry requests to the master device in the contents of the message.).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the controller of Garahi and Mauger to

include request and response messages such as retry messages in the signaling data as taught by Hosomi to give a priority to retry requests, wherein the retry requests with the highest priority are requests that have previously been sent (Hosomi: [0015], [0100]).

13. Claims 33, 34, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garahi and Mauger, and further in view of US Patent 5,550,914 to Clarke et al. (hereinafter "Clarke").

As per Claim 33, the combination of Garahi and Mauger discloses **a method of Claim 26**, but are silent on receiving bi-directional signals from two distinct entities in communication with one another.

However, Clarke discloses, **wherein the communications session traffic reading comprises reading first payload data for a communication from the first to the second entity and second payload data for a communication from the second to the first entity** (Clarke: Col. 14, lines 28-59. A message interceptor is placed between two signaling end-points in a point-to-point connection. The interceptor utilizes an interface to receive a first portion of a link from the first end-point, and an interface to receive a second portion of a link from the second end-point. Col. 3, lines 46-59. The data extracted from the messages received from the first and second end-points can be of a combination of data items with a range of values.).

Garahi discloses **wherein the determining whether the payload data identifies a controlled type of traffic determines whether both the first and the second payload data are of the controlled traffic type** (Garahi: Col. 4, lines 66-67 and Col. 5, lines 1-30. The types of traffic contained in the data packet that can be controlled are: Type 1 data, Type 2 data, and Type 3 data. Col. 6, lines 43-49. The controller determines and specifies a traffic path based on the content of payload. For example, if the controller identifies the type to be "Type 1" traffic, it chooses a path of low latency.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the controller of Garahi and Mauger to further include a session involving a first and second endpoint in communication with one another, receiving payloads from both, and identifying the payloads of both end-points as taught by Clarke to reduce the amount of processing overhead at a signaling end-point while in communication with another end-point (Clarke: Col. 2, lines 13-19).

As per Claim 34, Garahi and Mauger are silent on storing payload data from both the end-points.

However, Clarke discloses **a method as claimed in Claim 33, further comprising buffering the first and second payload data for the determining** (Clarke: Col. 10, lines 25-30. The transfer circuit comprises a buffer for storing the MSU (message signal unit) received from each end-point.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the controller of Garahi and Mauger to

further include a buffer for storing the contents of a message from end-points in a communication system as taught by Clarke to reduce the amount of processing overhead at a signaling end-point while in communication with another end-point (Clarke: Col. 2, lines 13-19).

As per Claim 47, the combination of Garahi and Mauger discloses **a router as claimed in Claim 46**, but are silent on receiving bi-directional signals from two distinct entities in communication with one another.

However, Clarke discloses **wherein the code further comprises code to store portions of the payload data of the communications session sent from both the first and the second entity** (Clarke: Col. 10, lines 25-30. The transfer circuit comprises a buffer for storing the MSU (message signal unit) received from each end-point.).

Garahi discloses **wherein the code to determine whether the payload data identifies traffic of the controlled type is configured to determine when communications from both the first and second entities are of a the controlled type** (Garahi: Col. 4, lines 66-67 and Col. 5, lines 1-30. The types of traffic contained in the data packet that can be controlled are: Type 1 data, Type 2 data, and Type 3 data.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the controller of Garahi and Mauger to further include a session involving a first and second endpoint in communication with one another, receiving payloads from both, and identifying the payloads of

both end-points as taught by Clarke to reduce the amount of processing overhead at a signaling end-point while in communication with another end-point (Clarke: Col. 2, lines 13-19).

14. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garahi and Mauger, and further in view of US patent 5,593,502 to Helbig, Sr. (hereinafter "Helbig").

As per Claim 35, Garahi and Mauger are silent on comparing the payload with a signature to a controlled type of traffic.

However, Helbig discloses **a method as claimed in Claim 26, wherein the determining comprises comparing the payload data with a signature of the controlled type of traffic** (Helbig: Col. 2, lines 1-12. data tampering is determined by checking the digital signal signature of incoming data to previously stored digital signatures.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the controller of Garahi and Mauger to include a signature comparison function as taught by Helbig to easily detect intrusion tampering (Helbig: Col. 2, lines 9-12).

15. Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garahi and Mauger, and further in view of US Patent Publication 2003/0229900 A1 to Reisman (hereinafter "Reisman").

As per Claim 36, Garahi and Mauger are silent on interrupting the communication session.

However, Reisman discloses **a method as claimed in Claim 26, further comprising signaling, responsive to the determining, to at least one of the first and second entities to interrupt the communications session** (Reisman: pg. 98, col. 1, lines 23-32. A session can be interrupted during browsing interactions.).

Therefore, it would have been obvious to one of ordinary skill in the art the time the invention was made to modify the teachings of Garahi and Mauger to include interrupting communication sessions as taught by Reisman to have the option of changing the connection or streaming session with the option of re-establishing the session later (Reisman: [0134], [0057]).

As per Claim 37, Garahi and Mauger are silent on attempting to resume the communication session.

However, Reisman discloses **a method as claimed in Claim 26, wherein the further traffic comprises an attempt to begin a further communications session of the controlled traffic type or to resume the communications session, and wherein the controlling comprises controlling traffic of the further or resumed communications session** (Reisman: pg. 98, col. 1, lines

23-32. A session can be interrupted during browsing interactions. The session parameters are stored to later resume the session from the point of interruption.).

Therefore, it would have been obvious to one of ordinary skill in the art the time the invention was made to modify the teachings of Garahi and Mauger to include resuming communication sessions as taught by Reisman to have the option of changing the connection or streaming session with the option of re-establishing the session later (Reisman: [0134], [0057]).

16. Claims 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garahi in view of US Patent 6,954,797 B1 to Takeda et al. (hereinafter "Takeda").

As per Claim 48, Garahi discloses **a carrier medium carrying computer readable code for a router for routing peer-to-peer traffic on an internet protocol (IP) packet data network, the router having a data table identifying peer-to-peer sockets** (Garahi: Col. 14, lines 28-33. The computer readable medium contains instructions to perform the method. Col. 3, lines 54-57. RAM is used to store routing information.), **the code comprising code to:**
**read payload data of a packet of data traffic** (Garahi: Figures 3 and 4; Col. 6, lines 39-43. Node 102.1 receives a data packet and examines the contents of the packet.);
**determine whether the payload data relates to a peer-to-peer protocol** (Garahi: Col. 4, lines 66-67 and Col. 5, lines 1-30. The types of traffic contained in the data packet that can be controlled are: Type 1 data, Type 2 data, and Type

3 data. Col. 6, lines 43-49. The controller determines and specifies a traffic path based on the content of payload. For example, if the controller identifies the type to be "Type 1" traffic, it chooses a path of low latency.);

**and route packets of data traffic on the network responsive to the socket data in the data table** (Col. 7, lines 41-45. The controller attaches a header to the packet with a destination address to transmit to the next available node based on information contained in the packet and routing table information.).

Garahi is silent on writing socket data to a routing table.

However, Takeda discloses **write socket data for the payload data into the table responsive to the determining** (Takeda: Col. 44, lines 65-67; Col. 45, lines 1-24. The terminal point control table has an entry for storing socket identifiers.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the controller of Garahi to include storing socket data as taught by Takeda to facilitate proper routing of data packets to desired destinations and reduce redundancy such as specific header information when forwarding data packets on a distinct link (Takeda: Col. 16, lines 37-43).

As per Claim 49, discloses a carrier medium as claimed in Claim 48, but is silent on code to cause closure of one end of the communication system.

However, Takeda discloses **wherein the code further comprises code to cause closure of at least one end of a connection used for communicating the payload data** (Takeda: Col. 11, lines 34-39. The

connection close operation is performed when an end-point requests the transmission to end.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the controller of Garahi to include ending a connection between two points as taught by Takeda by removing redundant information and increasing efficiency of packet transfer rate (Col. 16, lines 1-3).

***Conclusion***

17. Prior art made of record not relied on include:

US Patent 7,092,391 B2 to Umeda teaches a multi-hop peer-to-peer network that corrects routing information in a dynamically changing network.

US Patent Publication 2004/0125776 A1 to Haugli et al. teaches a peer-to-peer communication system with dynamic routing.

US Patent Publication 2004/0165587 A1 to Kiyoto et al. teaches a policy settable peer-to-peer network.

US Patent Publication 6,650,642 B1 to Sugai et al. teaches network relay device for high speed routing.

US Patent 6,708,233 B1 to Fuller et al. teaches an apparatus for buffering streaming data.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN ELLIOTT whose telephone

number is (571)270-7163. The examiner can normally be reached on Monday thru Friday, 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571)272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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